

## The Puget Sound Leadership Council's 2011 Resolutions on Target Setting for 18 Indicators

Available at: [http://www.psp.wa.gov/LC\\_resolutions.php](http://www.psp.wa.gov/LC_resolutions.php)

Current as of November 23, 2011

| Indicator  | Target  | The Leadership Council resolves that a functioning, resilient ecosystem includes:   | Link to resolution  |
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| <b>Land Development (includes Urban Growth Areas target)</b> | <p>Basin-wide, by 2020, loss of vegetation cover on indicator land base over a 5-year period does not exceed 0.15% of the 2011 baseline land area.</p> <p>By 2020, the proportion of basin-wide growth occurring within Urban Growth Areas is at least 86.5% (equivalent to all counties exceeding goal by 3%) and all counties show an increase over their 2000-2010 percentage.</p> | Puget Sound landscapes that provide important habitat and hydrology functions and a land base to support the built environment for a growing human population.  | <p><a href="http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-23.pdf">http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-23.pdf</a></p> <p><a href="http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-22.pdf">http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-22.pdf</a></p> |
| <b>Land Cover</b>  | By 2020, average annual loss of forested land cover to developed land-cover in non-federal lands does not exceed 1,000 acres per year and 268 miles of riparian vegetation are restored or restoration projects are underway.   | Sufficient forestlands, agricultural lands, open space, natural lands (i.e., forest, prairie), and developed lands and related infrastructure to support habitat needs, support natural processes, and generate ecosystem services. | <a href="http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-21.pdf">http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-21.pdf</a>   |
| <b>Marine</b>  | By 2020, all Puget Sound regions and  | Sediment quality that   | <a href="http://www.psp.wa.gov/do">http://www.psp.wa.gov/do</a>   |

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| <b>sediment quality</b>       | <p>bays (as characterized by ambient monitoring) achieve the following: Chemistry measures reflect “minimum exposure” (i.e., mSQS is &lt;0.1 and the SCI is &gt;93.3),</p> <p>Sediment Quality Triad Index (SQTI) scores reflect “unimpacted” conditions (i.e., SQTI values &gt;83),</p> <p>and no measurements exceed the Sediment Quality Standards chemical criteria set in the Washington State sediment management standards.</p> | supports functioning, healthy communities of sediment-dwelling invertebrates.   | <a href="http://www.psp.wa.gov/donloads/LC_Resolutions/Resolution_2011-19.pdf">wnloads/LC_Resolutions/Resolution_2011-19.pdf</a>                        |
| <b>Pacific herring</b>        | <p>By 2020, achieve increased spawning biomass for each genetic grouping to a minimum of:</p> <ul style="list-style-type: none"> <li>a. 5,000 tons for Cherry Point stock</li> <li>b. 880 tons for Squaxin Pass stock</li> <li>c. 13,500 tons for all other stocks combined</li> </ul>   | Herring to satisfy predators’ consumption requirements, meet bait and other fishery needs, and assure sufficient herring for successful spawning and recruitment. | <a href="http://www.psp.wa.gov/donloads/LC_Resolutions/Resolution_2011-18.pdf">http://www.psp.wa.gov/donloads/LC_Resolutions/Resolution_2011-18.pdf</a> |
| <b>Orca</b>                   | By 2020, achieve an end of year census of southern resident killer whales of 95 individuals, which would represent a 1.0% annual average growth rate from 2010 to 2020.  | A viable population of southern resident killer whales.   | <a href="http://www.psp.wa.gov/donloads/LC_Resolutions/Resolution_2011-17.pdf">http://www.psp.wa.gov/donloads/LC_Resolutions/Resolution_2011-17.pdf</a> |
| <b>On-site Sewage Systems</b> | By 2020, all on-site sewage systems in marine recovery areas and other areas with equivalent enhanced operation and maintenance programs are inventoried, 95% are current with inspections, and all  | Management of wastewater in a manner that protects aquatic resources and human health.  | <a href="http://www.psp.wa.gov/donloads/LC_Resolutions/Resolution_2011-16.pdf">http://www.psp.wa.gov/donloads/LC_Resolutions/Resolution_2011-16.pdf</a> |

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failed systems are fixed and expand designations of marine recovery areas or designation of other areas with equivalent enhanced operation and maintenance to 90% of marine shorelines not primarily served by sewers.

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| <b>Shoreline armoring</b> | From 2011 to 2020, the total amount of armoring removed is greater than the total amount of new armoring in Puget Sound (total miles removed > total miles added); feeder bluffs receive strategic attention for removal of existing armoring and avoidance of new armoring; and soft shore techniques are used for all new and replacement armoring, unless it is demonstrably infeasible | Dynamic shorelines maintained by coastal processes such as shoreline erosion and ecological exchange between terrestrial and aquatic systems.  | <a href="http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-15.pdf">http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-15.pdf</a> |
| <b>Chinook salmon</b>     | By 2020 we stop the overall decline and start seeing improvements in wild Chinook abundance in 2-4 populations in each biogeographic region.   | A spatially and genetically diverse collection of viable Chinook salmon populations.   | <a href="http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-14.pdf">http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-14.pdf</a> |
| <b>Floodplains</b>        | By 2020, 15% of degraded floodplain areas are restored or floodplain projects to achieve that outcome are underway across Puget Sound and there is no additional loss of floodplain function in any Puget Sound watershed relative to a 2011 baseline.   | Freshwater floodplains that support natural processes and deliver ecological services to keep people and property safe during flood flows, support fisheries production, and provide water filtration and ground water recharge. | <a href="http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-13.pdf">http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-13.pdf</a> |
| <b>Estuaries</b>          | By 2020, all Chinook natal river deltas  | Tidally-influenced wetland   | <a href="http://www.psp.wa.gov/do">http://www.psp.wa.gov/do</a>   |

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|                       | <p>meet 10-year salmon recovery goals (or 10% of restoration need as proxy for river deltas lacking quantitative acreage goals in salmon recovery plans) and 7,380 quality acres are restored basin-wide, which is 20% of restoration need.</p>  | <p>habitats at the estuaries of Puget Sound's major rivers that provide ecosystem functions, goods, and services.</p> | <p><a href="#">wnloads/LC Resolutions/Resolution 2011-12.pdf</a></p>   |
| <b>Toxics in fish</b> | <p>By 2020, toxics in fish are below threshold levels. Target is achieved if each of the following conditions is observed in monitoring results from 2019 or 2020:</p> <ul style="list-style-type: none"> <li>a. Bioaccumulative toxics – 95% of samples meet the following thresholds: <ul style="list-style-type: none"> <li>i. Concentrations of PCBs and PBDEs in Puget Sound herring, English sole, and salmon and steelhead are below adverse effects thresholds (e.g., 2,400 ng PCB/g lipid and 1,400 ng PBDE/g lipid)</li> <li>ii. Concentrations of PCBs and other biocumulative toxics in Puget Sound herring, English sole, and salmon and steelhead are below human- health screening levels (e.g., Department of Health screening levels for recreational or subsistence consumption rates, currently 33 ng PCB/g and 10 ng PCB/g fish tissue, respectively for a non-cancer</li> </ul> </li> </ul> | <p>Fish populations not harmed by toxic contaminants and fish safe for consumption by predators and humans.</p>       | <p><a href="http://www.psp.wa.gov/donloads/LC Resolutions/Resolution 2011-11.pdf">http://www.psp.wa.gov/donloads/LC Resolutions/Resolution 2011-11.pdf</a></p> |

endpoint).

b. PAHs and EDCs – all samples meet the following thresholds:

i. English sole in Puget Sound exhibit no PAH-related liver disease

ii. English sole in Puget Sound exhibit no toxics-related reproductive impairment

iii. PAHs in herring are below an effects threshold.

**Dissolved oxygen in marine waters**

By 2020, human-related contributions of nitrogen do not result in more than 0.2 mg/L reductions in dissolved oxygen levels anywhere in Puget Sound

Dissolved oxygen concentrations in marine waters to support Puget Sound species, communities, and food webs.

[http://www.psp.wa.gov/downloads/LC\\_Resolutions/Resolution\\_2011-10.pdf](http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-10.pdf)

**Benthic invertebrates**

By 2020, 100% of Puget Sound lowland stream drainage areas monitored with baseline B-IBI scores of 42-46 or better retain these “excellent” scores and mean B-IBI scores of 30 Puget Sound lowland drainage areas improve from “fair” to “good”

Lowland streams that support the salmonids and invertebrates native to this region.

[http://www.psp.wa.gov/downloads/LC\\_Resolutions/Resolution\\_2011-09.pdf](http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-09.pdf)

**Fresh water quality**

By 2020, at least 50 percent of all monitoring stations with suitable data have Freshwater Water Quality Index scores of 80 or higher

Freshwater water quality that protects aquatic life and other uses of the state’s waters

[http://www.psp.wa.gov/downloads/LC\\_Resolutions/Resolution\\_2011-08.pdf](http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-08.pdf)

And

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By 2020, achieve a decrease in the number of impaired waters (303(d) list) in Puget Sound freshwaters.

**Summer  
stream flows**

By 2020, meet the following river-specific targets:

- a. Maintain stable or increasing flows in highly regulated rivers: Nisqually, Cedar, Skokomish, Skagit, Green
- b. Monitor low flow in Elwha River after dam removal
- c. Maintain stable flows in unregulated rivers that are currently stable: Puyallup, Dungeness, Nooksack
- d. Restore low flows to bring the Snohomish River from a weakly decreasing trend to no trend
- e. Restore low flows to bring the Deschutes River, North Fork Stillaguamish River, and Issaquah Creek from a strongly decreasing trend to a weakly decreasing trend

Summer stream flows that support salmon habitat needs, other ecosystem needs, and provide water for people

[http://www.psp.wa.gov/downloads/LC\\_Resolutions/Resolution\\_2011-07.pdf](http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-07.pdf)

**Swimming  
beaches**

By 2020, all monitored Puget Sound beaches meet enterococcus standard

Water quality at swimming beaches that protects human health

[http://www.psp.wa.gov/downloads/LC\\_Resolutions/Resolution\\_2011-06.pdf](http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution_2011-06.pdf)

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| <b>Shellfish Beds</b> | A net increase from 2007 to 2020 of 10,800 harvestable shellfish acres, which includes 7,000 acres where harvest is currently prohibited. | None specified | <a href="http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution%202011-02%20shellfish%20beds%20restored%20target.pdf">http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution%202011-02%20shellfish%20beds%20restored%20target.pdf</a> |
| <b>Eelgrass</b>       | Eelgrass extent in 2020 is 120 percent of area measured in the 2000-2008 baseline period.   | None specified | <a href="http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution%202011-01%20eelgrass%20target.pdf">http://www.psp.wa.gov/downloads/LC_Resolutions/Resolution%202011-01%20eelgrass%20target.pdf</a>                                       |

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